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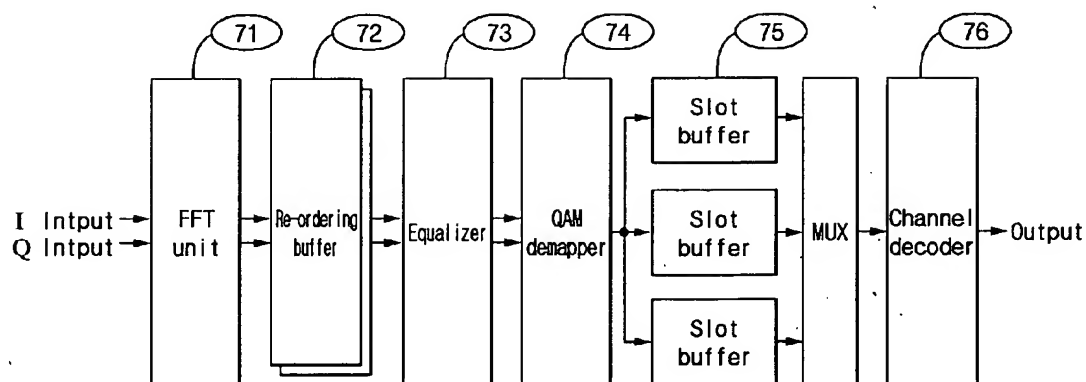
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[Continued on next page]

(54) Title: DEMODULATION APPARATUS FOR EFFICIENTLY EMBODYING ADAPTIVE MODULATION AND CODING METHOD IN OFDMA BASED PACKET COMMUNICATION SYSTEM AND METHOD THEREOF



(57) Abstract: Disclosed is a demodulation apparatus for receiving signals by an adaptive modulation and coding method, and demodulating the signals, in an OFDMA based packet communication system, comprising: a QAM demapper for performing QAM demapping to the received signals by a modulation method using a maximum modulation ratio, until modulation methods for each of sub-channels are analyzed; a slot buffer for storing the data outputted from the QAM demapper; a channel decoder for decoding the data stored in the slot buffer and analyzing modulation methods for each sub-channels and transferring the analyzed modulation methods to the QAM demapper; and in at the same time, reading valid data from the data stored in the slot buffer, based on the analyzed modulation methods for each sub-channels, and demodulating the valid data.



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